

## TWO NEW SPECIES OF THE GENUS *HEMICHEYLETIA* FROM CHINA (ACARI, CHEYLETIDAE)

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**Abstract** The present paper describes two new species of the genus *Hemicheyletia* which were from Guizhou Province, China. The type specimens are deposited in the Institute of Entomology, Guizhou University (GUGC).

**Key words** Acari, Cheyletidae, *Hemicheyletia*, new specie, China.

The genus *Hemicheyletia* was erected by Volgin in 1969 (Type species: *Paracheyletia bakei* Ehara). The diagnosis of this genus are: coxa I and II not much separated, body ovoid or pyriform, leg I shorter or slightly longer than idiosoma and leg II, tarsus I – II with claws and empodium, palptarsus with 2 comb-like setae, hysterosoma with 1 shield, propodosoma with 1 pair of eyes, antero- and postero-lateral setae on propodosoma similar in size and shape, palptibial claw with many teeth.

Summers and Price (1970) combined 3 genera to this group and gave a key for 13 species. Corpuz-Raros (1972), Qayyum and Chaudhri (1979), Rasool and Chaudhri (1979b), Mathur and Mathur (1981) added 4, 2, 2 and 1 new species respectively to this genus. Chaudhri and Akbar (1985) described 11 new species in this genus. Ehara and Ibrahim described 1 new species from Malaysia. Razzaq *et al.* (2001) described external features of *H. bakeri* (Ehara), found in citrus orchards of Japan. Dogan and Ayyildiz (2004) described 2 new records of *Hemicheyletia* for the Turkish fauna. Muhammad Kamran *et al.* (2005) described 1 new species from Pakistan.

Two new species belonging to the genus *Hemicheyletia* are described in this paper. The measurements are given in  $\mu\text{m}$ . The type specimens are deposited in Institute of Entomology, Guizhou University (GUGC).

### 1 *Hemicheyletia polyseta* sp. nov. (Figs 1–7)

Female. Body round in outline, 432.4 long (not including gnathosoma) and 309.7 wide. Gnathosoma 171.4 in length and 108 in width. Rostrum 117.4 in length and 67.5 in width.

Two comb-like setae and three falcate setae on palptarsus outer combs with 22 teeth, inner combs

with 16 teeth. Palptibial claw 60.7 long, base of the claw 9.4 wide with five teeth. Two scalloping setae and one long seta in palpgenu, four scalloping setae in palpfenur. Peritrematalia composed of seven parts.

One pair of eyes on the antero-lateral of anterior dorsal plate and between second and third pair of lateral setae. Anterior dorsal plate 172.8 in length, 249.7 in width, with four pairs of lateral setae and five pairs of medial setae. Posterior dorsal plate 189 in length, 236.2 in width, with six pairs of lateral setae and five pairs of medial setae. One pair of humeral setae lying on interscutal membrane. All dorsal setae scalloping.

Length of legs: I 297.0, II 270.0, III 290.2, IV 287.5. The number of legs' seta and sensory: basal segment 2-1-2-2; trochanter 1-1-1-1; femur 2-2-2-1; genu 2-2-2-2; tibia 4-3-3-3; tarsus 8-7 (1) -7-7.

Holotype ♀, collected from stored Chinese traditional medicinal materials-*Hypericum perforatum*, Guiyang City, Guizhou Province, China, 10 Apr. 2007, by ZHAO Xiao-Yu.

Male. Unknown.

Etymology. This new specie is named after its character of 21 setae, more than most known species at present.

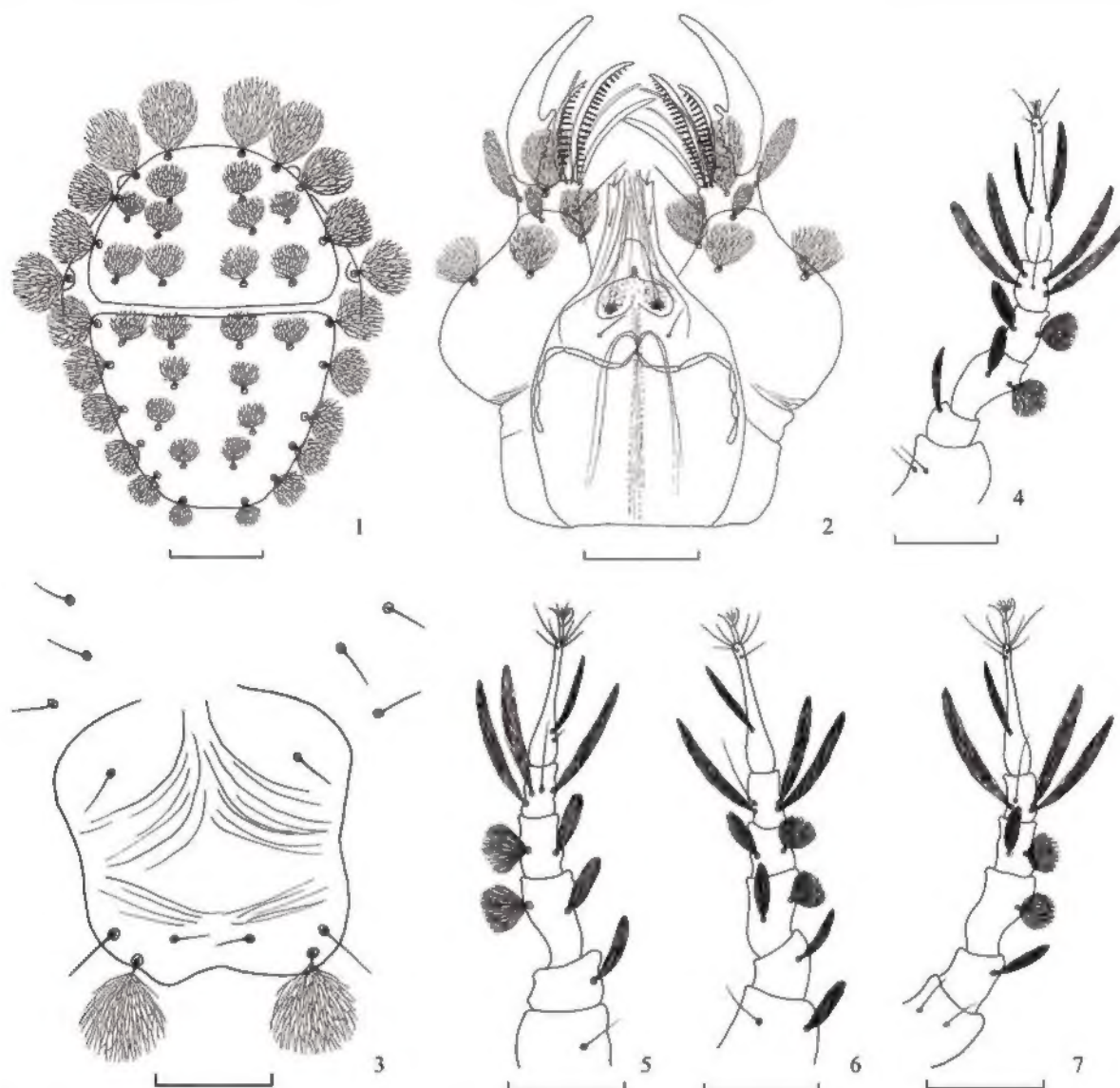
The new species is similar with *H. pusillifolium* Lin, Pen *et* Chen, and *H. scutellata* (De Leon), but can be differentiated from the later two species by number of dorsal seate: there are 21 pairs of dorsal median setae in the new one, while 13 pairs only in the later twos.

### 2 *Hemicheyletia guiyangensis* sp. nov. (Figs 8–14)

Male. Body round in outline, 294.5 long (not including gnathosoma) and 198.4 wide. Gnathosoma 125.5 in length and 74.2 in width. Rostrum 89.1 in length and 47.3 in width.

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Figs 1–7. *Hemichyletia polyseta* sp. nov., ♀. 1. Dorsal view. 2. Gnathosoma. 3. Genital area. 4. Leg I. 5. Leg II. 6. Leg III. 7. Leg IV. Scale bars: 1 = 200  $\mu$ m, 2, 4–7 = 50  $\mu$ m, 3 = 20  $\mu$ m.

Two pectinate setae and three falcate setae on palptarsus. Outer combs with 16 teeth, in inner combs with 12 teeth. Palptibial claw 41.8 long, base of claw 4.7 wide, with four teeth. Two scalloping setae and one long seta on palpgenu. Four scalloping setae on palpfenur. Peritrematalia is composed of seven parts.

One pair of eyes lies on the outer lateral of anterior dorsal plate and between second and third pair of lateral setae. Anterior dorsal plate 117.4 in length, 159.3 in width, with four pairs of lateral setae and three pairs of medial setae. Posterior dorsal plate, 162 in length, 148.5 in width, with five pairs of lateral setae and one pair of medial setae. One pair of humeral setae lying on interscutal membrane. All dorsal setae are scalloping.

One pair of setae and one pair of scalloping setae on the lateral of genital area. Three pairs of small setae in the genital opening and one pair of setae near the

genital opening.

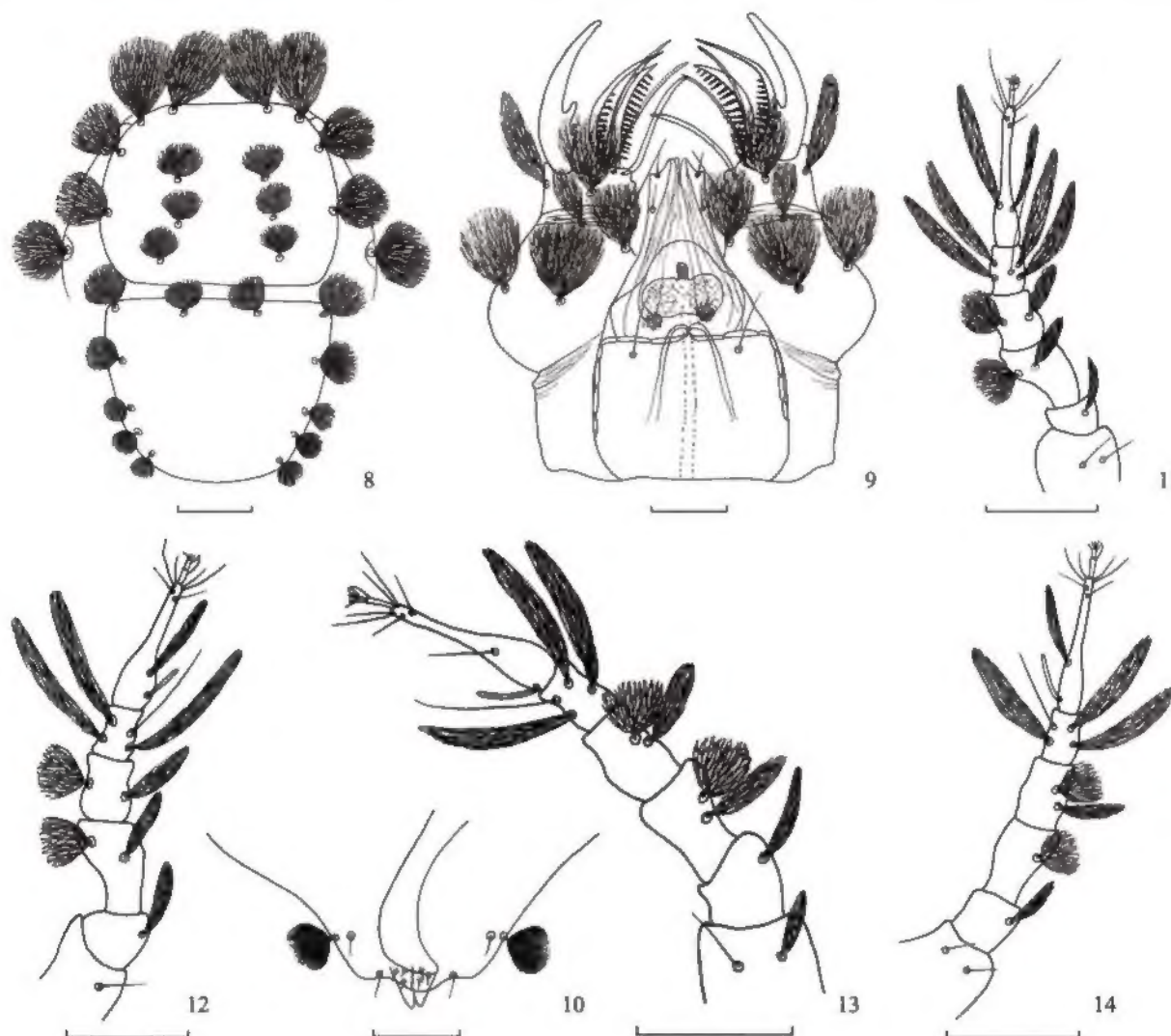
Lengths of leg: I 236.2, II 216, III 218.7, IV 225.4. The number of legs' seta and sensory are: basal segment 2-1-2-2; trochanter 1-1-1-1; femur 2-2-2-1; genu 2-2-2-2; tibia 4-3-3-3; tarsus 8-7 (1) -7 (1) -7 (1).

Holotype ♂, collected from stored Chinese medicinal materials-*Nardostachys chinensis* from Guiyang City, Guizhou Province, China, 20 Apr. 2007, by ZHAO Xiao-Yu.

Female. Unknown.

Etymology. This new species is named after the name of place where specimen collected, Guiyang City.

The new species is similar to *H. pusillifolium* Lin, Pen et Chen, *H. scutellata* (De Leon) and *H. anabora* (De Leon). However, the new species has 14 pairs of dorsal setae, while *H. pusillifolium* and *H. scutellata*



Figs 8–14. *Hemicheyletia guiyangensis* sp. nov., ♂. 8. Dorsal view. 9. Gnathosoma. 10. Genital area. 11. Leg I. 12. Leg II. 13. Leg III. 14. Leg IV. Scale bars: 8, 11–14 = 50  $\mu\text{m}$ , 9–10 = 20  $\mu\text{m}$ .

(Deleon) have 13 pairs. The dorsal median setae of *H. anabora* (De Leon) are setaceous, but those of the new species are fan-shaped.

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## 中国半扇毛螨属两新种记述 (蜱螨亚纲, 肉食螨科)

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**摘要** 记述肉食螨科 Cheyletidae, 半扇毛螨属 *Hemicheyletia* 的2新种: 采自贵阳储藏中药材连翘内的多毛半扇毛螨 *Hemicheyletia polyseta* sp. nov., 采自贵阳储藏中药材甘松内的贵

阳半扇毛螨 *Hemicheyletia guiyangensis* sp. nov.。标本保存在贵州大学昆虫研究所。

**关键词** 蜱螨亚纲, 肉食螨科, 半扇毛螨属, 新种, 中国.

**中图分类号** Q959.226